

REMARKS

Applicant appreciates the thorough examination of the application that is reflected in the Office Action dated June 9, 2003. Minor changes are made to the Abstract. Specifically, Applicant amends the Abstract remove reference numerals from the Abstract. Applicant also amends page 4 of the specification as requested by the Examiner.

Applicant cancels claim 20 since claim 20 was a duplicate of claim 9. Applicant amends claims 1-19 to correct informalities and to use proper English phraseology. These amendments do not alter the scope of claims 1-19, and are not made in response to any rejection in the Office Action.

Claims 1-19 are pending in the application. Reexamination and reconsideration of the application are respectfully requested.

Art-based Rejections**Claims 1 and 4**

The Official Action rejects claim 1 under 35 U.S.C. 102(b) as being anticipated by Horner et al. (USPN 5,357,544 A), and rejects claims 2, 3 and 6-20 under 35 U.S.C. 103(a) as being unpatentable over Horner et al. further in view of Soliman et al. (USPN 6,321,090 B1).

Applicant respectfully traverses these rejections for at least the following reasons.

Claim 1

To assist the Examiner in understanding how claim 1 reads on an embodiment of the invention shown, for example, in FIG. 3, Applicant annotates claim 1 as indicated below. The application discusses this embodiment, for example, at page 8:17 through page 9:2 and at page 11:1 through page 12:11 of the specification. Applicant notes that the claims should not be construed as being limited to these embodiments, and that the annotation is provided only for the purpose of showing the Examiner how claim 1 reads on these embodiments. Claim 1 relates to a communication receiver that requires:

 a receiver portion (302) for down converting a received signal to base band frequency;

 a low pass filter (304) for filtering said base band frequency signal to produce on-channel received samples (305); and

a processor (307) for processing said base band frequency to produce out-of-channel received samples (306).

Applicant respectfully submits that the cited references fail to teach or suggest, for example, “a processor for processing said base band frequency to produce out-of-channel received samples,” as recited in claim 1. For exemplary benefits associated with this feature, see, for example, p. 14:1-7 of the present application. Applicant notes that the claims should not be construed as being limited by this embodiment or by the particular benefits described.

As shown in FIG. 2 of the Horner et al. reference, the 152 KHz output of the A/D converter 18 is passed to the mixing function 26. The output of the mixing function 26 is passed through a low-pass anti-aliasing filter 30 and then to an 8 to 1 decimator function 32 that reduces the processing rate from 152 KHz to 19 KHz thereby providing an error signal at the rate of once per pilot period. Significantly, the output of the mixing function 26 is not passed to a processor, much less “a processor for processing said base band frequency to produce out-of-channel received samples,” as recited in claim 1.

Applicant submits that the Soliman reference also does not teach or suggest this feature of claim 1.

Thus, Applicant respectfully submits that the cited references fail to teach or suggest at least the above recitations of claim 1. Accordingly, Applicant respectfully submits that claim 1 is patentable over the cited references. In addition, Applicant respectfully submits that dependent claims 2-5 are separately patentable at least by virtue of their dependency from independent claim 1, and also because those claims recite additional features that are not taught or suggested by the cited references.

Claim 6 and 17

Claim 6 recites:

down converting a received signal to produce on-channel and out-of-channel received samples;

processing said on-channel received samples to decode on-channel information; and

processing said out-of-channel received samples to determine at least one of a link quality and global positioning system originated information. (Emphasis added.)

Applicant submits that the cited references fail to teach or suggest the above limitations of claim 6.

For example, the cited references fail to teach or suggest “down converting a received signal to produce on-channel and out-of-channel received samples,” as required by claim 6. The Examiner cites FIG. 2 and the text at col. 3, lines 44-57 of Horner et al. as allegedly teaching “down converting a received signal to produce on-channel and out-of-channel received samples.” Applicant respectfully disagrees. The cited portion of the Horner et al. reference describes a conventional downconverter and discusses that “downconverter/discriminator 16 down converts the frequency of the selected band from the radio frequency range (RF) to an intermediate frequency (IF) band. Downconverter/discriminator 16 then extracts the encoded signal ... by stripping away the carrier.”

However, the cited portion of the Horner et al. reference does not teach or suggest producing two types of samples, much less “down converting a received signal to produce on-channel and out-of-channel received samples,” as required by claim 6. Applicant submits that the Soliman reference also does not teach or suggest this feature of claim 6.

In addition, Applicant further submits that the cited references fail to teach or suggest “processing said out-of-channel received samples to determine at least one of a link quality and global positioning system originated information,” as required by claim 6. The Examiner cites col. 2, lines 43-45 of Horner et al. as allegedly teaching “processing said out-of-channel received samples to determine at least one of a link quality.” Applicant respectfully disagrees. The cited portion of the Horner et al. reference discusses “a method of decoding a composite signal ...which includes receiving a composite signal including a pilot signal and ...information modulated with a subcarrier at a harmonic of the pilot frequency.” However, the cited portion of the Horner et al. reference does not teach or suggest processing of samples, much less “processing said out-of-channel received samples to determine at least one of a link quality and global positioning system originated information,” as required by claim 6. Applicant submits that the Soliman reference also does not teach or suggest this feature of claim 6.

Thus, Applicant respectfully submits that the cited references fail to teach or suggest at least the above recitations of claim 6. Accordingly, Applicant respectfully submits that claim 6 is patentable over the cited references. In addition, Applicant respectfully submits that dependent

claims 7-8 are separately patentable at least by virtue of their dependency from independent claim 6, and also because those claims recite additional features that are not taught or suggested by the cited references.

Applicant further submits that independent claim 17 is patentable for at least the same reasons, and that dependent claims 18 and 19 are patentable at least by virtue of their dependency from independent claim 17.

Claims 9 and 17

Claim 9 relates to a method for determining a hard handoff candidate in a mobile station, and requires “down converting said received broad band signal to on-channel traffic channel received samples and out-of-channel pilot channel received samples.” (Emphasis added.) For at least the reasons discussed above with respect to claim 6, Applicant submits that the cited references fail to teach or suggest the above limitations of claim 9.

Thus, Applicant respectfully submits that the cited references fail to teach or suggest at least the above recitations of claim 9. Accordingly, Applicant respectfully submits that claim 9 is patentable over the cited references. In addition, Applicant respectfully submits that dependent claims 10-12 are separately patentable at least by virtue of their dependency from independent claim 9, and also because those claims recite additional features that are not taught or suggested by the cited references.

Applicant further submits that independent claim 13 is patentable for at least the same reasons, and that dependent claims 14-16 are patentable at least by virtue of their dependency from independent claim 13.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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